facilitate stable integration of the expression cassette into the chloroplast genome by homologous recombination.

22. (New) The expression cassette claim 21 wherein the control sequences comprise a promoter functional in said chloroplast, and a transcription and translation terminator sequences.

23. (New) The expression cassette of claim 21 wherein the chloroplast DNA sequences flank the 3' and 5' ends of the DNA sequence coding for the polypeptide of interest.

24. (New) The expression cassette of claim 22 wherein the transcription and translation termination sequences comprise a 3' inverted repeat region of a chloroplast gene functional to stabilize the RNA of the heterologous DNA sequence.

25. (New) The expression cassette of claim 22 which comprises, associated therewith, restriction sites to facilitate insertion of a heterologous DNA sequence encoding a polypeptide of interest into the cassette.

26. (New) The expression cassette of claim 22 wherein the promoter is an inducible promoter.

27. (New) The expression cassette of claim 22 which comprises multiple promoters inserted in tandem 5' of the heterologous DNA sequence coding for a polypeptide of interest.

28. (New) The expression cassette of claim 27 comprising a double *psb*A promoter.

29. (New) The expression cassette of claim 22 wherein the promoter is selected from the group consisting of the *psb*A promoter, the rbcL promoter, the *atp*B promoter, and the *r*RNA promoter.

30. (New) The expression cassette of claim 22 wherein the promoter is selected from the group consisting of a constitutive promoter, a regulatable promoter and an inducible promoter.

31. (New) A chloroplast expression vector comprising as operably joined components,

(a) a promoter functional in a chloroplast, a DNA sequence comprising a plurality of cloning sites,

(b) a transcriptional termination region, and

(c) chloroplast DNA sequences flanking (a) wherein said chloroplast DNA sequences facilitate stable integration of the expression vector into the chloroplast genome wherein one cloning site is capable of incorporating a heterologous DNA sequence encoding a polypeptide of interest and another cloning site is capable of incorporating one additional structural gene or a functional portion thereof encoding a polypeptide which confers a selectable trait, said expression vector further comprising, inserted into said cloning site in reading frame with said promoter, at least one additional structural gene or functional portion thereof encoding a polypeptide which confers a selectable trait.

32. (New) A stably transformed plant chloroplast comprising a DNA construct comprising, as operably joined components, a promoter functional in said chloroplast, a heterologous DNA sequence encoding a polypeptide of interest, at least one additional structural

gene or a functional portion thereof encoding a polypeptide which confers a selectable trait, wherein transcription of said DNA sequence is regulated by said promoter, a transcriptional termination region and chloroplast DNA sequences flanking the expression cassette to facilitate stable integration of the expression cassette into the chloroplast genome by homologous recombination.

33. (New) A plant chloroplast according to claim 32, wherein the plant is a higher plant.

34. (New) A plant chloroplast expression vector which comprises an expression cassette comprising operably joined, a heterologous DNA sequence coding for a polypeptide of interest, at least one additional structural gene or functional portion thereof encoding a polypeptide which confers a selectable trait, and, upstream of said DNA sequence, an entire promoter region from a gene capable of expression in the plant chloroplast to provide for initiation, and, downstream of said structural gene or a functional portion thereof, a termination region for termination of transcription to provide for expression of the coding sequence in the chloroplast of the target plant, and chloroplast DNA sequences flanking the expression cassette to facilitate stable integration of the expression cassette into the chloroplast genome by homologous recombination.

35. (New) The chloroplast expression vector of claim 31, wherein the additional structural gene or a functional portion thereof encoding a polypeptide of interest is a foreign gene, a native regulatable gene, a synthetic gene, or a mutant native gene.

36. (New) The expression cassette of claim 22, wherein the promoter is selected from the group consisting of the *psb*A, the rbcL, the *atp*B or the *r*RNA promoter.

37. (New) The expression cassette of claim 22, which comprises an enhancer sequence in addition to the promoter.

38. (New) A chloroplast expression vector comprising as operably joined components,

(a) a promoter functional in a chloroplast, a DNA sequence comprising a plurality of cloning sites, a transcriptional termination region, and

(b) chloroplast DNA sequences flanking (a) wherein said chloroplast DNA sequences facilitate stable integration of the expression vector into the chloroplast genome wherein one said cloning site is capable of incorporating a heterologous DNA sequence encoding a polypeptide of interest and another said cloning site is capable of incorporating one additional structural gene or a functional portion thereof encoding a polypeptide which confers a selectable trait,

wherein said chloroplast expression vector further comprises a heterologous DNA sequence encoding a polypeptide of interest operably linked to the components in (a).

39. (New) The expression cassette of Claim 21 wherein said control sequence is a 5' untranslated region.

40. (New) The expression cassette of Claim 39 wherein said 5' untranslated region is taken from a gene wherein expression is regulatable by light.